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| APPLICATION NO.                 | FILING DATE     | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |  |
|---------------------------------|-----------------|----------------------|-------------------------|------------------|--|
| 10/017,850                      | 11/30/2001      | Daniel J. Aldrich    | 1708                    | 9608             |  |
| 7:                              | 7590 10/05/2004 |                      | EXAMINER                |                  |  |
| Harley R. Ball                  |                 |                      | TRUONG, LECHI           |                  |  |
| Sprint Law Dep<br>Mailstop: MOK |                 | ART UNIT             | PAPER NUMBER            |                  |  |
| 8140 Ward Parl                  | kway            | 2126                 |                         |                  |  |
| Kansas City, MO 64114           |                 |                      | DATE MAILED: 10/05/2004 |                  |  |

Please find below and/or attached an Office communication concerning this application or proceeding.



|  |  |  |  |  | (// /                     |
|--|--|--|--|--|---------------------------|
|  |  | Appli  | cation No.   | Applicant(s)   |                           |
|  |  |  | 7,850  | DANIEL J. ALDRICH  |                           |
| Office Action Summary  |  | Exam   | iner   | Art Unit   |                           |
|  |  | LeChi  | Truong   | 2126   |                           |
| Period fo  | The MAILING DATE of this communi<br>or Reply   | cation appears or  | the cover sheet  | with the correspondence addre  | )ss                       |
| THE N - Exter after - If the - If NO - Failu - Any r earne  Status | ORTENED STATUTORY PERIOD FOMAILING DATE OF THIS COMMUNION in the sign of time may be available under the provisions SIX (6) MONTHS from the mailing date of this community period for reply specified above is less than thirty (30 period for reply is specified above, the maximum stare to reply within the set or extended period for reply reply received by the Office later than three months at ad patent term adjustment. See 37 CFR 1.704(b).  Responsive to communication(s) file   | CATION. of 37 CFR 1.136(a). In runication. b) days, a reply within the tutory period will apply a will, by statute, cause the ter the mailing date of the  | no event, however, may<br>e statutory minimum of the<br>nd will expire SIX (6) Mine<br>e application to become<br>is communication, even                     | a reply be timely filed  nirty (30) days will be considered timely.  DNTHS from the mailing date of this comm  ABANDONED (35 U.S.C. § 133).                                      | nunication.               |
| · <u> </u>   |  | b)⊠ This action i  |  |  |                           |
|  | Since this application is in condition to closed in accordance with the practic  | for allowance exc  | ept for formal ma  |  | erits is                  |
| Dispositi  | on of Claims   |  |  | •  |                           |
| 5)⊠<br>6)⊠<br>7)⊠  | Claim(s) <u>1-24</u> is/are pending in the a 4a) Of the above claim(s) is/ar Claim(s) <u>19-24</u> is/are allowed. Claim(s) <u>1-16 and 18</u> is/are rejected. Claim(s) <u>17</u> is/are objected to. Claim(s) are subject to restric   | e withdrawn from   |  |  |                           |
| Applicati  | on Papers  |  |  |  |                           |
| 10)  | The specification is objected to by the The drawing(s) filed on is/are: Applicant may not request that any object Replacement drawing sheet(s) including The oath or declaration is objected to  | a) accepted on a) accepted on a control accepted on a control accepted and a control accepted | (s) be held in abey quired if the drawir   | ance. See 37 CFR 1.85(a).  |                           |
| Priority u   | ınder 35 U.S.C. §§ 119 and 120   |  |  |  |                           |
| a)[<br>13)□ A<br>si<br>3<br>a<br>14)□ A                            | Acknowledgment is made of a claim All b) Some * c) None of:  1. Certified copies of the priority of the priority of the certified copies of the priority of the certified copies of the certified copies of application from the Internation of the attached detailed Office action of the certified copies of the certified copies of application from the Internation of the attached detailed Office action of the certification of the foreign land ocknowledgment is made of a claim for the certified was included in the first sent deference was included in the first sent defere | documents have documents have of the priority doc hal Bureau (PCT in for a list of the cordonestic priority d in the first sente guage provisional priority domestic priority domestic priority domestic priority  | been received. been received in uments have bee Rule 17.2(a)). certified copies no ty under 35 U.S.0 ence of the specified application has ty under 35 U.S.0 | Application No en received in this National State of received. C. § 119(e) (to a provisional ap- ication or in an Application Da- been received. C. §§ 120 and/or 121 since a se | oplication)<br>ata Sheet. |
| Attachmen  | t(s) ·   |  |  |  |                           |
| 1) Notice 2) Notice  | e of References Cited (PTO-892)<br>e of Draftsperson's Patent Drawing Review (P<br>nation Disclosure Statement(s) (PTO-1449) Pa  | •  |  | v Summary (PTO-413) Paper No(s).<br>f Informal Patent Application (PTO-15  |                           |

Application/Control Number: 10/017,850 Page 2

Art Unit: 2126

#### **DETAILED ACTION**

1. Claims 1-24 are presented for the examination.

#### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-9,14-16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Edwards et al (US. 6,353,819 B1).
- 3. As to claim 1, Edwards teaches the invention substantially as claimed including: a first architecture layer (the RAM Codegen Executor Component layer 204, col 5, ln 19/ Fig. 2), a second architecture layer (the record file manager component layer 206, col 5, ln 5-7/ Fig. 2), a layer (the IO Random controller component layer 208, col 5, ln 20-25/ Fig. 2), the layer enabling the first architecture layer and the second architecture layer to communicate directly without having to communicate via the layer (col 2, ln 55-60/col 3, ln 13-17/col 5, ln 9-19/ ln 54-67). Edward does not explicit teach the layer as transparent. However, Edwards teaches transparent (the RFM component layer 206 receives the read and write requests from layer 204 ... it processes the file pages read by layer 208, col 5, ln 11 19). It would have been obvious to one of the ordinary skill in the art at the time the invention was made to apply the teaching of

Application/Control Number: 10/017,850

Art Unit: 2126

Edwards because Edwards's transparent would provides more efficiency method and system for improving relational data access performance in retrieving row data.

Page 3

- 4. As to claim 2, Edwards teaches a first layer object (the RAM Codegen Executor Component layer 204, col 5, ln 19/ Fig. 2), a second layer object (the record file manager component layer 206, col 5, ln 5-19/ Fig. 2), a layer (the IO Random controller component layer 208, col 5, ln 20-25/ Fig. 2), the layer object configured to be hidden for communication between the first layer object and the second layer object/ the communication between each other by bypassing the layer (col 2, ln 55-60/col 3, ln 13-17/col 5, ln 9-19 and ln 54-67).
- 5. As to claim 3, Edwards teaches a group comprising a control message, data (col 5, ln 44-48).
- 6. As to claim 4, Edwards teaches the first layer object is configured to transmit the communication to the second layer object (col 5, ln 5-9).
- 7. As to claim 5, Edwards teaches the second layer object is configured to transmit the communication to the first layer object (col 8, ln 27-32).
- 8. As to claim 6, Edwards teaches collapse the transparent layer object when the first layer object and the second layer object relay the communication (col 2, ln 55-60/col 3, ln 13-17/col 5, ln 9-19 and ln 54-67).
- 9. As to claim 7, Edwards teaches a plurality of transparent layer objects (a multi-layered relational database manager, col 2, ln 49-50).
- 10. As to claim 8, Edward teaches the communication comprises data (col 5, ln 48-50).

Application/Control Number: 10/017,850

Art Unit: 2126

11. As to claim 9, Edward teaches configured to receive data, to transmit the data to the first layer object, to receive other data from the first layer, and to render the other data (col 4, ln 65-67 to col 5, ln 1-4), user interface attachable to the first layer (col 1, ln 34 –38).

Page 4

- 12. As to claim 14, Edwards teaches an province configured (MFM component layer 206, col 8, ln 30-32), an action province configured with logic to process an action and to generate at least one query requesting data (col 5, ln 14-17/col 8, ln 53-56), query requesting data (col 5, ln 45-48), a yoke province (RAM Codegen Executor layer 204, col 5, ln 33), identify a database with a database type to which the query corresponds (col 5, ln 42-44), initiate a connection with the database to transmit the query to the database( col 5, ln 45-48), retrieve data in response to the query( col 5, ln 47-50), transmit the data to the action province( col 8, ln 29-32), a witness province( the Io Random Controller component layer 208, col 5, ln 20-21), the witness province configured to identify the action occurring via an input/output interface ( col 5, ln 20-23), notify with the action at least one member of a group( col 8, ln 51-53), at least one layer configured to enable communication with a surrounding layer without having to communicate via the layer( col 2, ln 55-60/col 3, ln 13-17/col 5, ln 9-19 and ln 65-67).
- 13. As to claim 15, it is an apparatus claim of claim 10; therefore, it is rejected for the same reason as claim 10 above.
- 14. As to claim 16, Edwards teaches apply logic to action and to direct transfers of the action the query (col 8, ln 44-46), store the data (col 8, ln 53-56), initiate storage and retrieval of the data to and from the database by identifying the database and generating the query for the database (col 8, ln 27-32), format the query generated from the persistent layer to the database format required by the database (col 5, ln 10-16).

Application/Control Number: 10/017,850 Page 5

Art Unit: 2126

15. As to claim 18, Edwards teaches the witness yoke province comprises a nomadic layer object configured to make a connection to the database and to pass the query to the database (col 5, ln 20-25/col 8, ln 44-46).

- 16. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Edwards et al (US. 6,353,819 B1) as applied to claim 1 above in view of Beer (US. Patent 5,793,368).
- 17. As to claim 10, Edwards does not teach a selected user interface type dynamically selectable and dynamically interchangeable from a plurality of user interface types. However, Beer teaches a selected user interface type dynamically selectable and dynamically interchangeable from a plurality of user interface types (dynamically switch between visual styles, col 2, ln 10-15).
- 18. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Edwards and Beer because Beer's dynamically switch between visual styles would reduce security risks when loading applications from servers by avoiding use of machine code in defining a user interface.
- 19. As to claim 11, Edwards teaches a graphical user interface, a web enable interface, a handles device interface, a voice simulate interface, a voice response interface, a voice activated interface, a voice recognition interface, and an audio interface (col 1, ln 18 -25).

Application/Control Number: 10/017,850 Page 6

Art Unit: 2126

20. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Edwards et al (US. 6,353,819 B1) as applied to claim 1 above in view of Rick (CA Ship Database-Management Suite For E-Commerce).

- 21. As to claim 12, Edwards does not teaches a plurality of databases, each database having a different database type. However, Rick teaches a plurality of databases, each database having a different database type (the oracle database... Sybase databases, page 1, ln 22-23).
- 22. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Edwards and Rick because Rick's a plurality of databases and each database having a different database type would provide greater availability than a single instance accessing a single database.
- 23. As to claim 13, Rick teaches a structured query language database, an Oracle database, a DB2 database, and an XML-based database (page 1, ln 22 -23).

#### Allowable Subject Matter

- 24. Claim 17 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 25. Claims 19-24 are allowed.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LeChi Truong whose telephone number is (571) 272 3767. The examiner can normally be reached on 8 - 5.

Application/Control Number: 10/017,850

Art Unit: 2126

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on 703-305-9678. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR of Public PAIP. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions on access to the Private PAIP system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

LeChi Truong

September 22, 2004

MENG-AL T. AN

Page 7

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100